Best.-Nr. 930333 (PMR)User Manual

Main Screen (Fig.1)

1—The Icon

(Fig.1)

--Normal Status VOX Status

2—Key Lock

3—Battery Icon

--Full

Empty remind you to change the batteries.

--When is flashing，batteries changes are must.

4—Sub-code

--CTCSS code (1-38 sub-codes)

--No display (No any code)

5--Channels

--PMR 1-8

6--"**R**" means receiving --"**T**" means transmitting

Installing Batteries

1、Rotate the belt clip anti-clockwise

2、Open the battery door

3、Install the batteries according to the anode-cathode signs shown in the battery compartment

4、Close the battery door and rotate the belt clip clockwise.

Note: please use 4"AAA" batteries

(Fig.2)

Quick Guide

1. When the unit is ready

A . **Open the unit：Press** key for 1sec., then you can hear a "DI", it means the unit is ready.

(Fig. 3)

B . Unlock：**If the unit has been locked (Refer to Fig. 1**，press key and hold, then press key within 1 sec that the lock will be unlocked, and a "DI, DI" sound will be heard (Refer to Figure 2)

(Fig. 4)

2. How to talk with your friend

A. You must make sure the unit is on the status (As Figure 2)

B. Select the same channel & sub-code as that of your friend's,

e.g. (CH8, SUBCODE 22)

(Fig. 5)

B1-In Figure 2, press key to enter Figure 3

B2-Press key to enter Figure 4

B3-Press key to confirm the setting and enter to Figure 5

B4-In Figure 5, press / key to select the channel from (P1-P8).

In this case, you need to choose P8

(Fig.6)

B5-press key to confirm the setting and return the main menu (Figure 2)

B6-In the figure 2, press key to enter figure 6

B7-Press key to enter Figure 7

(Fig. 7)

B8-Press / key to select the sub-code from （0 or 1-38）In this case, you need to choose subcode 22.

B9-Press key to confirm the setting and return the main menu (Figure 2)

C. Press the CALL or PTT key to connect the other side

(Fig. 8)

- Press the CALL key once to make a call ring tone or Refer to Figure 8, "call…" means transmitting status.
- Press the PTT key as long as you would like to talk to the other user.

(Fig. 9)

- If the device is in the transmitting status, "T" would be displayed on the LCD.
- (Refer to Figure 9)

D. Release the CALL or PTT key to receive the signal from other user.

--Release the CALL or PTT key and wait for signal, Refer to Figure 10, if "R" is displayed, it means that the device is in receiving status. You can hear the call ring tone or the talk from the other user.

(Fig. 10)

Functions Setup

1. Setup the PMR Function

A. Setup the Channels

A1---In figure 2, press key to enter figure 3

A2---Press key to enter figure 4(figure 11/ figure 14)

A3---Press key to enter figure 5

A5---In figure 5, press / key to change the channel (P1-P8) In this case, you need to choose the channel 8.

A6---Press key to return to figure 2

B. Changing Subcodes

B1---In figure 2, press / key to enter the figure 6

B2---Press key to enter figure 7

B3---Press / key to change the subcodes sequentially from 0 / 1 to 38 or the other way round, if pressing time is over 1 sec.

B4---Press key to confirm the setting and return the main screen as Figure 2.

(Fig 11)

Remarks：CODE=00，means no subcodes, as in figure 11

C. To adjust the Suitable Volume

C1---In the main menu, press key to enter figure 12

C2---In figure 12, press / key to change the volume level, it'll change the VOL continually if you press the / key more than 1 second

(Fig. 12)

C3-- Press key to confirm the setting and return the main menu.

D. Changing（SQ）

D1---In figure 2, press / key to enter figure 13.

(Fig. 13)

D2---Then press key to enter figure 14

D3---Press / key to change the SQ level; it'll change the SQ continually if you press the / more than 1 second.

(Fig.14)

D4---Higher SQ level will have longer communication range, but the interference eliminlate ability is lower.

Lower SQ level will have shorter communication range, but the interference eliminla better.

(Fig.15)

D5---Then press key again to confirm the setting and return the Main menu.

(Fig.16)

E----Open/Close the VOX & Modulation Sensitivity

(Fig. 17)

Ea----Open the VOX

Ea1---- In Figure16, press the ^/v key to enter figure 15

Ea2----Press the ◉ key to enter its figure 16

Ea3----Press the ^/v key to move the arrow on the selectable item "on"

(Fig.18)

Ea4----Press ◉ key to confirm the VOX has been opened,
and returned to the main VOX screen figure 17.

Eb----Off the VOX

(Fig.19)

Eb1----In figure 2 press the ^/v key, enter figure 15.

Eb2----Press ◉ key enter its figure 16 (after the VOX has been opened)

Eb3----Press the ^/v key to move the arrow on the selectable item "off" (figure 18)

Eb4----Press ◉ key to close the VOX, and return the main screen

(Fig.20)

Ec----Changing the VOX Sensitivity

Ec1----In figure 16 or 18, press the ^/v key to move the arrow on the "b"

Ec2----Press ◉ key to enter figure 19

Ec3----Press the ^/v key to change the sensitivity of VOX,
It will change the VOX continually if you press the ^/v key more than 1 second.

(Fig.21)

Ec4---- The higher the b level, the lower the VOX sensitivity.

The lower the b level, the higher the VOX sensitivity.

(Fig.22)

Ec5----Press the ◉ key to confirm it is in the main screen

F. Selecting the call tone

(Fig.23)

F1---In figure 2, press^/v key to enter figure 20

F2---Press◉ key to enter figure 21

F3---Press^/vkey to select tone (1-8)，it'll change continually if you press the ^/v more than 1 second.

F4---Press◉ key to confirm the setting and return to main menu.

(Fig.24)

G. Open/ Close the MON function

G1---In figure 2, press^/vkey, enter the fig. 22

G2---Press◉key to open the MON function (As in figure 23)

G3---When MON function is opened，only SQ and VOL（under VOL Menu,. Press ◉key to enter figure 12）are activated.

G4---In figure 23, press key to close MON function

H. Open/Close the Channel & the auto-scan of Sub-code

(Fig.25)

Ha---（ON）

Ha1---In figure 2, press / key to enter figure 24

Ha2---Press key to enter figure 25

Ha3---Press / key to move to "UP"/ "DOWN"

Ha4---Press key to confirm the scan direction & to enter figure 11

Ha5--- Both of the channel number & the sub-code number are changing, it will stop 10 seconds when the unit find a channel and a subcode，in which transmission is taking place.

--Press key to confirm and stop scanning.

After that, you would stay in that particular channel and subcode.

If you do not press the key, after 10 seconds, scanning will take place again, unless you switch off the auto-scan function.

Hb----**(OFF)（When the scan is opened）**

In that channel, press the key to turn off.

3．Setup others function

A．LCD Backlit

A-1 ---- LCD Backlit would be on for about 15 sec., once a key is pressed.

B．Key lock or unlock

B1-- In the main screen (Figure 2), press the key and hold，then press the key within 1 sec., you can lock for all the keys, except PTT key, (E.g. figure 1).

B2-- In any screen, press the key and hold，then press the UP key in 1 sec., you can unlock for all the keys, except PTT key.

C．Auto-resume of the menus

---- When the menu is opened, if there is no operation in 5 seconds, it will return to the main screen automatically after 5 seconds.

D．Fast Changing

---- Used the / key to select the menu or adjust channel, subcode, volume setting, etc., it will change the no. of channel and subcode or the volume setting in sequentially, if you press the / key for more than 1 second.

4. Power Off

---- In the main screen (figure 2), pressing the key 2 seconds will switch off the unit.

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TECHNICAL SPECIFICATIONS

Description	**Specs**
Power Output	≤500 mW
Operating Frequency	446.00625～446.09375MHz
Channels	8
Codes	38
Modulation	FM
Talk Range	Unobstructed conditions: Up to 3KM
Power Source	4 AAA Alkaline Batteries or Accessories accumulator
LCD	Backlit

PMR 446 Transmit-Receive Frequencies (MHz)

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
1	446.00625	4	446.04375	7	446.08125
2	446.01875	5	446.05625	8	446.09375
3	446.03125	6	446.06875		

Interference Eliminator Code Chart

Code	Frequency(Hz)	Code	Frequency(Hz)	Code	Frequency (Hz)
1	67.0	14	107.2	27	167.9
2	71.9	15	110.9	28	173.8
3	74.4	16	114.8	29	179.9
4	77.0	17	118.8	30	186.2
5	79.7	18	123.0	31	192.8
6	82.5	19	127.3	32	203.5

7	85.4	20	131.8	33	210.7
8	88.5	21	136.5	34	218.1
9	91.5	22	141.3	35	225.7
10	94.8	23	146.2	36	233.6
11	97.4	24	151.4	37	241.8
12	100	25	156.7	38	250.3
13	103.5	26	162.2		

Troubleshooting of PMR

Problem	Solution
No Power	Reposition or replace batteries
Message Not Transmitted	Make sure the Push-to-Talk button is completely pressed as you transmit. Reposition or replace batteries.
Message Not Received	Confirm radios have the same Channel and Interference Eliminator Code settings. Make sure Push-to-Talk is not inadvertently being pressed. Reposition or replace batteries Obstructions, operating indoors or in vehicles may interfere with communication. Change your location. Check to make sure volume is enough to hear.
Hearing Other Conversation or Noise on a Channel	Confirm Interference Eliminator Code is set, (active settings are 1-38). Shared Channel or Interference Eliminator Code may be in use, try another.
Limited Talk Range	Steel/concrete structures, heavy foliage and use in buildings and in vehicles will decrease range, check for clear line of sight to improve transmission. Wearing radio close to body such as in a pocket or on a belt will decrease range, change location of radio.
Heavy Static or interference	Radios too close. Radios must be at least 5 feet apart, increase your distance. Radios too far apart. Obstacles interfere with transmission. Talk range is up to 2 miles in clear, unobstructed conditions.